

# Resource Summary Report

Generated by [NIF](#) on Aug 24, 2026

## Monte Carlo eXtreme

RRID:SCR\_007001

Type: Tool

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### Proper Citation

Monte Carlo eXtreme (RRID:SCR\_007001)

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### Resource Information

**URL:** <http://mcx.sourceforge.net/>

**Proper Citation:** Monte Carlo eXtreme (RRID:SCR\_007001)

**Description:** A Monte Carlo simulation software for photon migration in 3D turbid media. It uses Graphics Processing Units (GPU) based massively parallel computing techniques and is extremely fast compared to the traditional single-threaded CPU-based simulations. Using an nVidia 8800GT graphics card (14MP/114Cores), the acceleration is about 300x~400x compared to a single core of Xeon 5120 CPU; this ratio can be as high as 700x with a GTX 280 GPU and 1400x with a GTX 470.

**Abbreviations:** MCX

**Synonyms:** Monte Carlo eXtreme (MCX)

**Resource Type:** simulation software, software application, software resource

**Keywords:** c, console (text based), macos, microsoft, modeling, monte carlo, optical imaging, other programming language, posix/unix-like, win32 (ms windows), windows

**Availability:** GNU General Public License

**Resource Name:** Monte Carlo eXtreme

**Resource ID:** SCR\_007001

**Alternate IDs:** nlx\_155817

**Alternate URLs:** <http://www.nitrc.org/projects/mcextreme>

**Record Creation Time:** 20220129T080239+0000

**Record Last Update:** 20260821T193807+0000

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### Ratings and Alerts

No rating or validation information has been found for Monte Carlo eXtreme.

No alerts have been found for Monte Carlo eXtreme.

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## Data and Source Information

**Source:** [SciCrunch Registry](#)

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## Usage and Citation Metrics

We found 2 mentions in open access literature.

**Listed below are recent publications.** The full list is available at [NIF](#) .

Khateeb K, et al. (2022) A versatile toolbox for studying cortical physiology in primates. Cell reports methods, 2(3).

Brigadoi S, et al. (2014) A 4D neonatal head model for diffuse optical imaging of pre-term to term infants. NeuroImage, 100, 385.